**Antibiotic resistance and plasmid profile of Aeromonas hydrophila isolates from cultured fish, Telapia (Telapia mossambica)**


ABSTRACT

Strains of Aeromonas hydrophila isolates from skin lesions of the common freshwater fish, Telapia mossambica, were screened for the presence of plasmid DNA by agarose gel electrophoresis and tested for susceptibility to 10 antimicrobial agents. Of the 21 fish isolates examined, all were resistant to ampicillin and sensitive to gentamycin. Most isolates were resistant to streptomycin (57%), tetracycline (48%) and erythromycin (43%). While seven of 21 isolates harboured plasmids, with sizes ranging from 3 to 63·4 kilobase pair (kb), it was only possible to associate the presence of a plasmid with antibiotic resistance (ampicillin and tetracycline) in strain AH11. Both the plasmid and the associated antimicrobial resistance could be transferred to an Escherichia coli recipient by single-step conjugation at a frequency of 4·3×10ī 3 transconjugants per donor cell.



**Keyword:** Aeromonas hydrophila; Telapia; Antibiotic resistance; Plasmid